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WATER SUPPLY OUTLOOK FOR ARIZONA



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAR. 15, 1974

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Snow Surveyors near Ship Creek,
Alaska snow course.*

U.S. GOVERNMENT PRINTING OFFICE

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

|||||
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PRESIDENT
SALT RIVER VALLEY WATER
USERS ASSOCIATION

|||||
Report prepared by

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SOIL CONSERVATION SERVICE
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PHOENIX, ARIZONA 85025

ARIZONA WATER SUPPLY OUTLOOK

MARCH 15, 1974

Water supplies will be adequate in areas served by reservoir storage. Although snow cover varies from 41% to 97% of average, streamflow is predicted to be only 20% to 46% of average due to the dry soil moisture conditions. Water supplies will be short in the Safford and Duncan Valleys.

SNOW COVER

A moderate storm crossed the state on March 8 and 9, increasing the snowpack slightly at elevations above 9,000 feet. At the lower elevations, however, melt more than offset the precipitation.

Snow cover varies from slightly below average on the Salt and Verde Watersheds to less than half of average on the Gila. The extremely high temperatures from March 10 to 19 are reducing the snowpack rapidly.

The snow line is around 7,000 feet on the Verde and Salt Watersheds and 8,000 feet on the Gila. Depths of 2, 3, and 4 feet are typical at 9, 10, and 11,000 feet respectively on the San Francisco Peaks, the White Mountains, and the Gila Mountains. Snow cover along the "Rim" is still proportionately high, ranging from 6 inches in the area south of Heber to 3 to 3½ feet at Baker Butte #2 and Promontory Butte.

PRECIPITATION

Although variable, precipitation for the first half of March has been near normal on the major watersheds. Since November 1, however, precipitation ranges from 60% of average on the Gila to 85-90% on the Salt and Verde.

SOIL MOISTURE

In areas where significant melt has occurred surface soils are quite wet, but at the higher elevations, where little melt has taken place, soils are still very dry. Much above average precipitation is necessary to produce normal runoff this season.

RESERVOIR STORAGE

Although stored water is declining, all major reservoir systems still contain above average amounts of water due to carryover from last year. Stockwater supplies are low in most areas and small irrigation reservoirs are below average.

STREAMFLOW AND WATER SUPPLY

Streamflow in most streams increased slightly by mid-month, but not nearly in proportion to the snowmelt. The Gila continued to decline, dropping below 100 cfs on March 7. A moderate warm storm in the next few weeks could cause significant increases in streamflow, but the present snowpack (with average precipitation) will result in much below average runoff. March through May streamflow is forecast to be 20% of average on the Gila, 25% on the Little Colorado, 39% on the Salt, and 46% on the Verde. This is only 5-10% of that received last year. By contrast, the Colorado River forecast of 7,572,000 acre-feet is 110% of average.

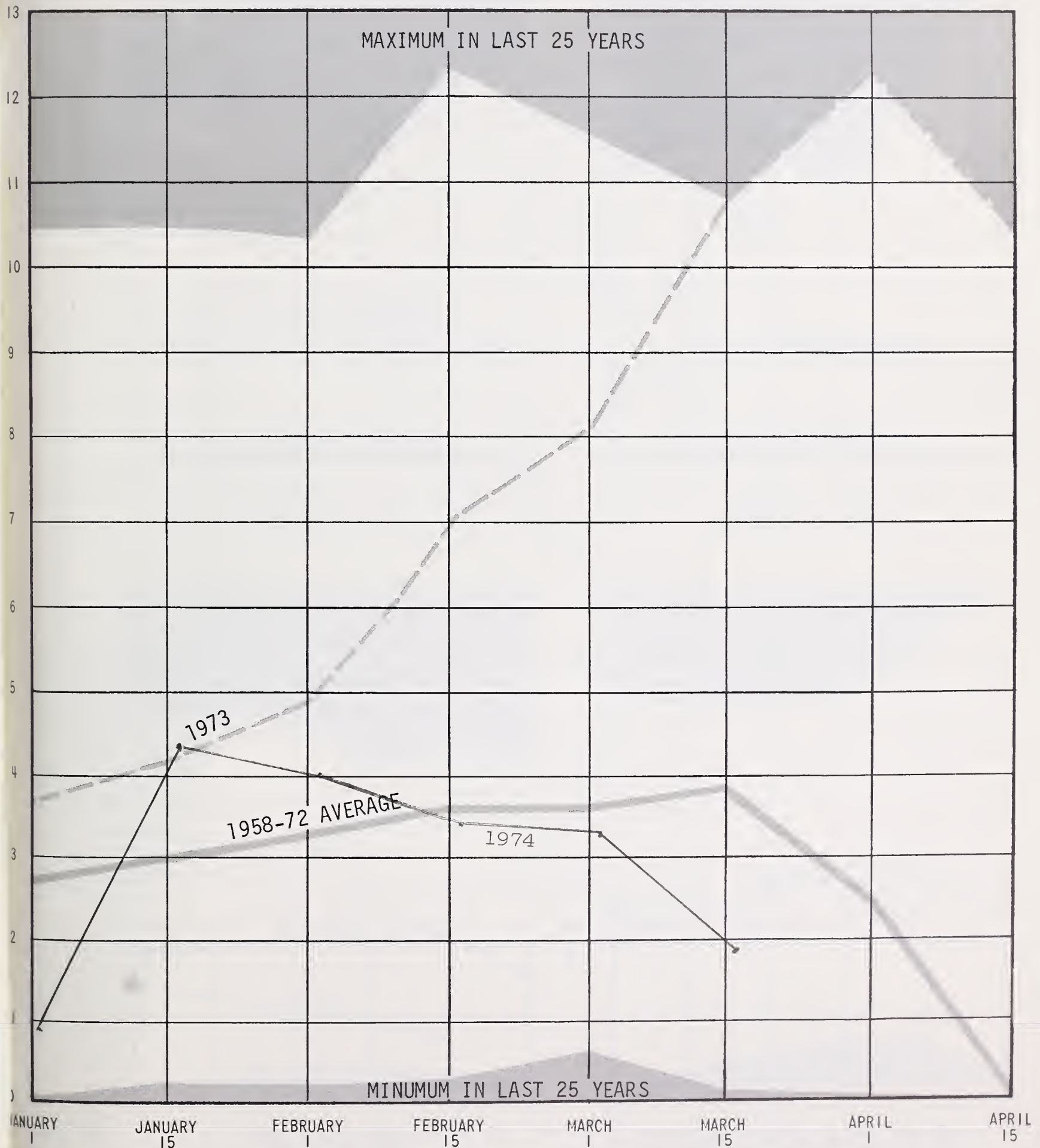
Adequate water supplies will be available this year on the major irrigation projects served by storage facilities, but considerable pumping will be required along the Upper Gila to augment the low river flow.

STREAMFLOW FORECASTS ABOUT MARCH 15, 1974

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average †
<u>SALT RIVER DRAINAGE</u>					
Salt near Roosevelt	25	31	March	306.5	81.9
"	88	39	Mar-May	1,009.6	224.6
Tonto Creek near Roosevelt	3	20	March	101.4	14.7
"	5	22	Mar-May	157.8	23.1
Verde River above Horseshoe	23	38	March	224.6	60.4
"	53	46	Mar-May	648.8	114.4
Total Salt River Project	55	35	March	632.5	157.0
"	146	40	Mar-May	1,816.2	362.1
<u>GILA RIVER DRAINAGE</u>					
Gila River at Bylas	4	7	Mar-May	414.2	54.9
Gila River near Gila	12	31	Mar-May	156.1	38.3
Gila River near Solomon	7	15	March	167.4	46.2
"	17	19	Mar-May	465.6	90.5
Gila River near Virden	9	20	Mar-May	212.3	46.0
Frisco River at Clifton	9	19	Mar-May	251.0	46.9
Frisco River at Glenwood	3	15	Mar-May	137.2	20.6
<u>LITTLE COLORADO RIVER DRAINAGE</u>					
Little Colo. River above Lyman Dam	2.4	25	Mar-June	50.8	9.8
<u>GRANITE CREEK DRAINAGE</u>					
Granite Creek	.5	---	Mar-May	---	---
Willow Creek	.2	---	Mar-May	---	---
<u>MIMBRES RIVER DRAINAGE</u>					
Mimbres River near Mimbres	1	32	Mar-May	13.3	3.1
<u>COLORADO RIVER DRAINAGE</u>					
Virgin River near Littlefield	35	81	Apr-June	208.3	43.2
Colorado River -- Lake Powell Inflow (issued by SCS, Utah)	7572	110	Apr-July	---	6,881
† Based on the 15-year period, 1958-72					
- 2 -					

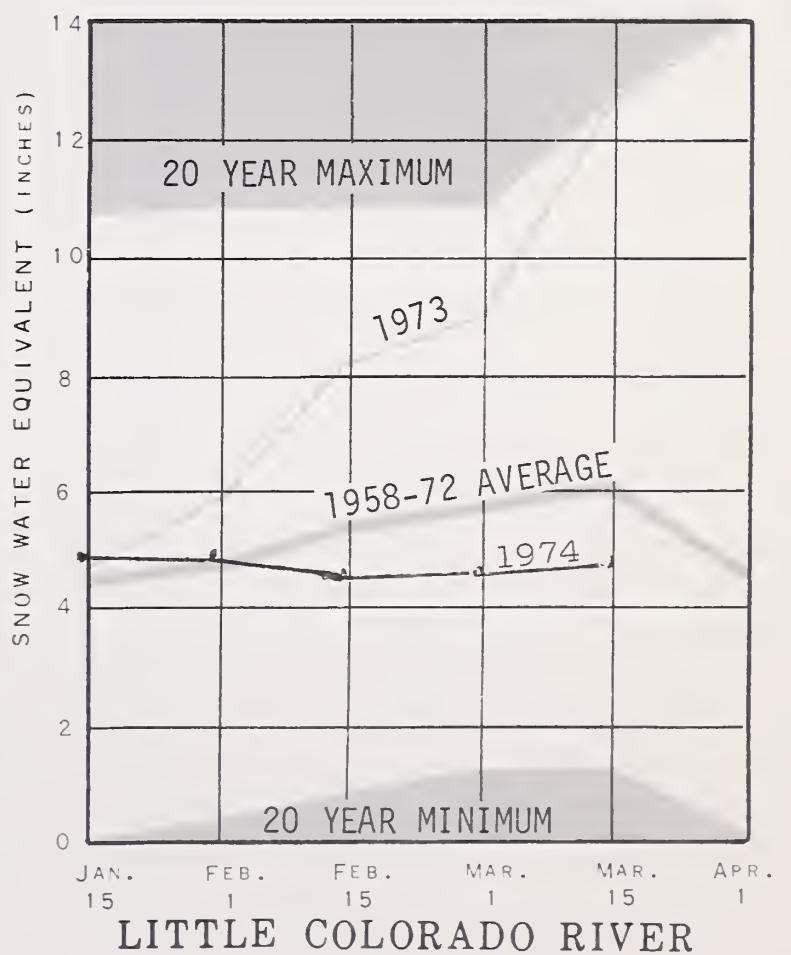
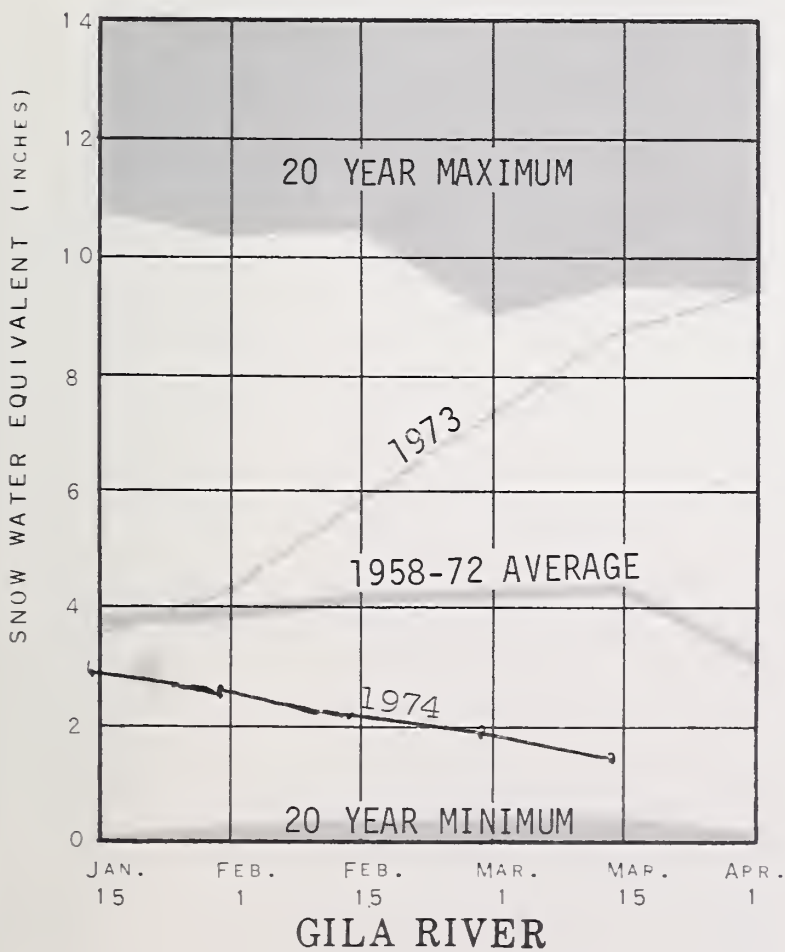
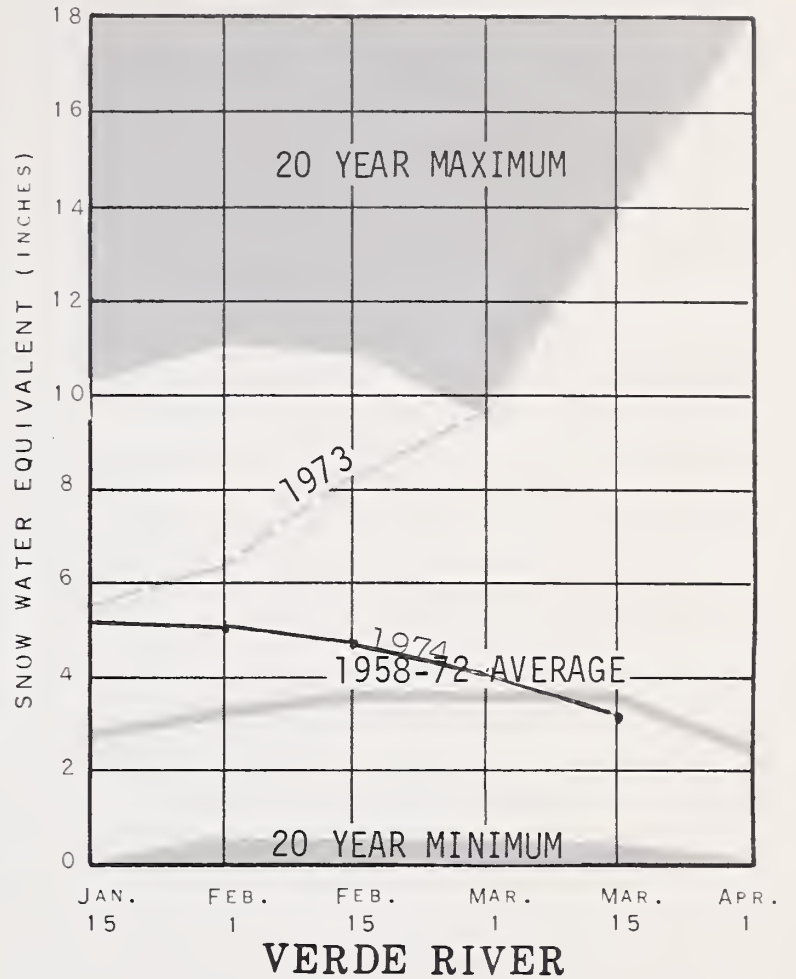
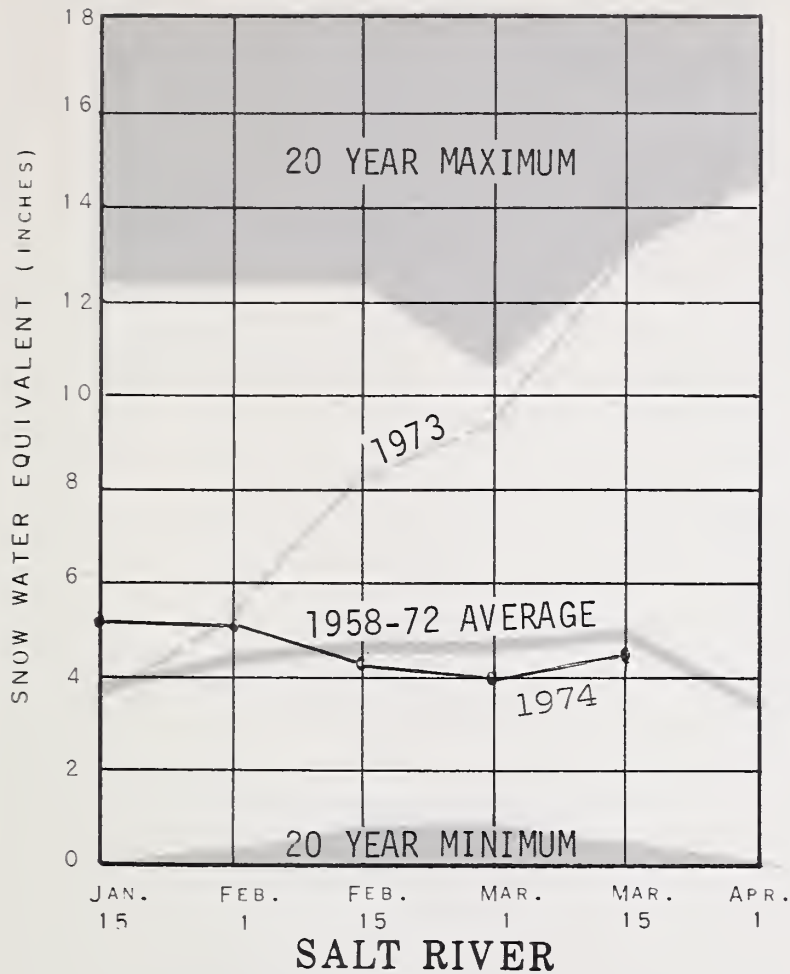
+ 1958-1972 period.

AVERAGE SNOW COVER ARIZONA 1974



This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.

1974 WATERSHED SNOW COVER



SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

ABOUT MARCH 15, 1974

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average
Gila	10	19	41
Salt	10	35	92
Verde	10	26	97
Little Colorado	5	42	85
- 6 -			

WATER SUPPLY INVENTORY
SALT RIVER VALLEY SYSTEM

MARCH 15, 1974

IN ACRE-FEET

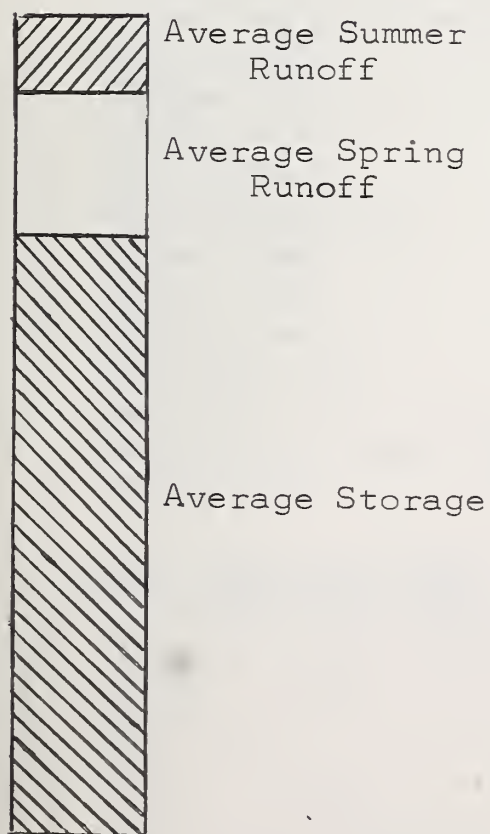
3,000,000

AVERAGE SUPPLY
ON MARCH 15

2,500,000

ANTICIPATED 1974 SUPPLY *

2,000,000

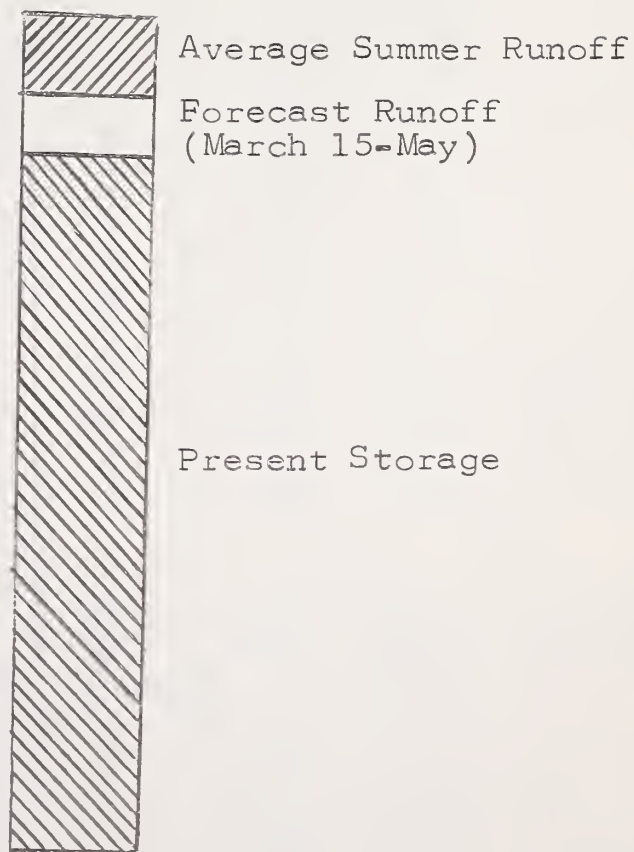


1,500,000

1,000,000

500,000

0



Based on Present Storage + Forecast Spring Runoff + Average Summer Runoff

SNOW ABOUT MARCH 15, 1974

SNOW		ABOUT MARCH 15, 1974		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)			
NAME	Elevation				Last Year	Average †		
GILA RIVER								
Bear Wallow	8100	3/14	2	0.8	7.7	5.0		
Beaver Head	8000	3/15	0	0.0	6.8	2.8		
Coronado Trail	8000	3/15	0	0.0	8.2	2.2		
Emory Pass #1 *	7800	3/13	0	0.0	0.9	0.3**		
Emory Pass #2 *	7800	3/13	0	0.0	3.6	0.7**		
Frisco Divide	8000	3/14	1	0.2	6.8	2.4		
Hannagan Meadows *	9090	3/15	19	6.7	19.3	8.9**		
Hummingbird (A) <u>1</u> /	10550	3/13	33	10.9	26.9	16.3**		
McKnight Cabin * (A) <u>1</u> /	9300	3/13	1	0.5	---	2.5**		
Mogollon	7000	3/14	0	0.0	1.2	1.2		
Nutriosos	8500	3/14	0	0.0	5.4	1.4		
Redstone Trail	8600	3/14	10	3.7	12.1	7.4**		
Rose Canyon	7300	3/14	0	0.0	6.0	2.0		
Silver Creek Divide	9000	3/14	18	5.8	17.1	12.2**		
State Line	8000	3/14	0	0.0	7.6	1.8		
Whitewater (A) <u>1</u> /	10750	3/13	48	13.0	28.8	20.3**		
<u>1</u> / Ground Measurements								
VERDE RIVER								
Baker Butte	7300	3/14	15	6.5	18.4	5.0**		
Baker Butte #2	7700	3/14	37	12.9	25.4	---		
Camp Wood	5700	3/13	T	0.1	1.3	0.4		
Chalender *	7100	3/15	8	2.9	10.0	2.2		
Copper Basin Divide	6720	3/14	4	1.1	8.1	1.2**		
Fort Valley	7350	3/14	1	0.7	8.9	2.0		
Gaddes Canyon	7600	3/15	17	5.2	15.4	5.3		
Happy Jack	7630	3/14	5	1.6	15.6	2.6		
Iron Springs *	6200	3/14	0	0.0	1.6	0.4		
Mingus Mountain	7100	3/15	0	0.0	5.3	0.7		
Mormon Lake *	7350	3/14	9	3.2	16.2	3.4		
Mormon Mountain	7500	3/14	13	5.5	18.7	4.7		
Newman Park	6750	3/14	1	0.2	11.7	1.5**		
Snow Bowl #1	10260	3/15	31	9.0	22.0	9.9**		
Snow Bowl #2	11000	3/15	47	13.3	35.2	18.0**		
White Horse Lake Jct.	7150	3/15	4	1.8	13.0	3.2**		
White Spar	6000	3/14	0	0.0	2.3	0.4**		
LOWER COLORADO RIVER								
Bill Williams Int.	8550	3/15	29	9.7	22.9	8.0**		
Bill Williams Summit	8950	3/15	37	11.4	27.0	11.1**		
Bright Angel	8400	D E L A Y E D			19.4	---		
Chalender *	7100	3/15	8	2.9	10.0	2.2		
Fort Valley	7350	3/14	1	0.7	8.9	2.0		
Grand Canyon	7500	3/14	0	0.0	8.3	1.2		
Williams Ski Run	7720	3/15	27	7.8	18.8	7.0**		
† 1958-72 15-year period. (*) Adjacent drainage. (**) 1958-72 Adjusted average. (A) Aerial observation; water content estimated.								

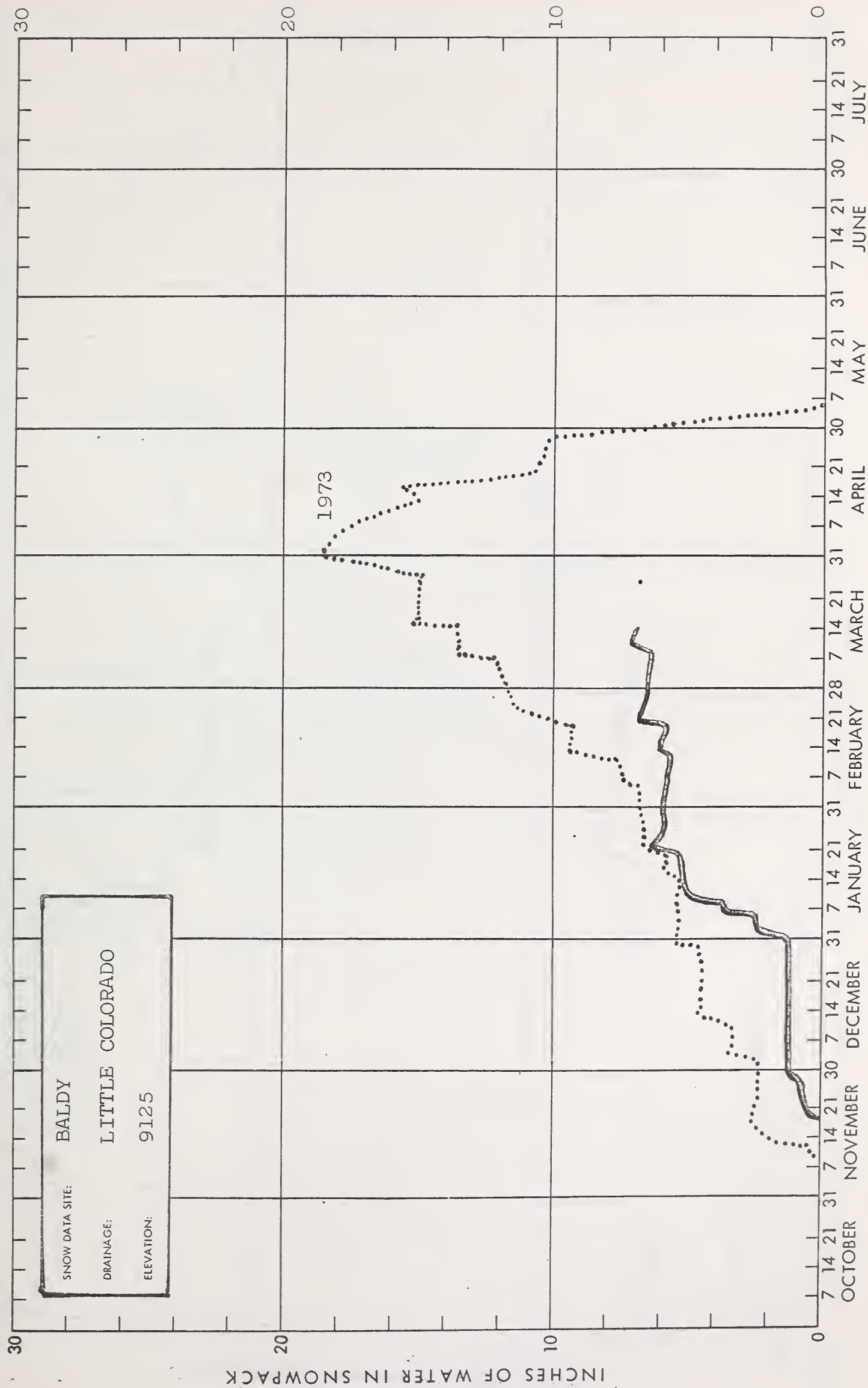
SNOW

ABOUT MARCH 15, 1974

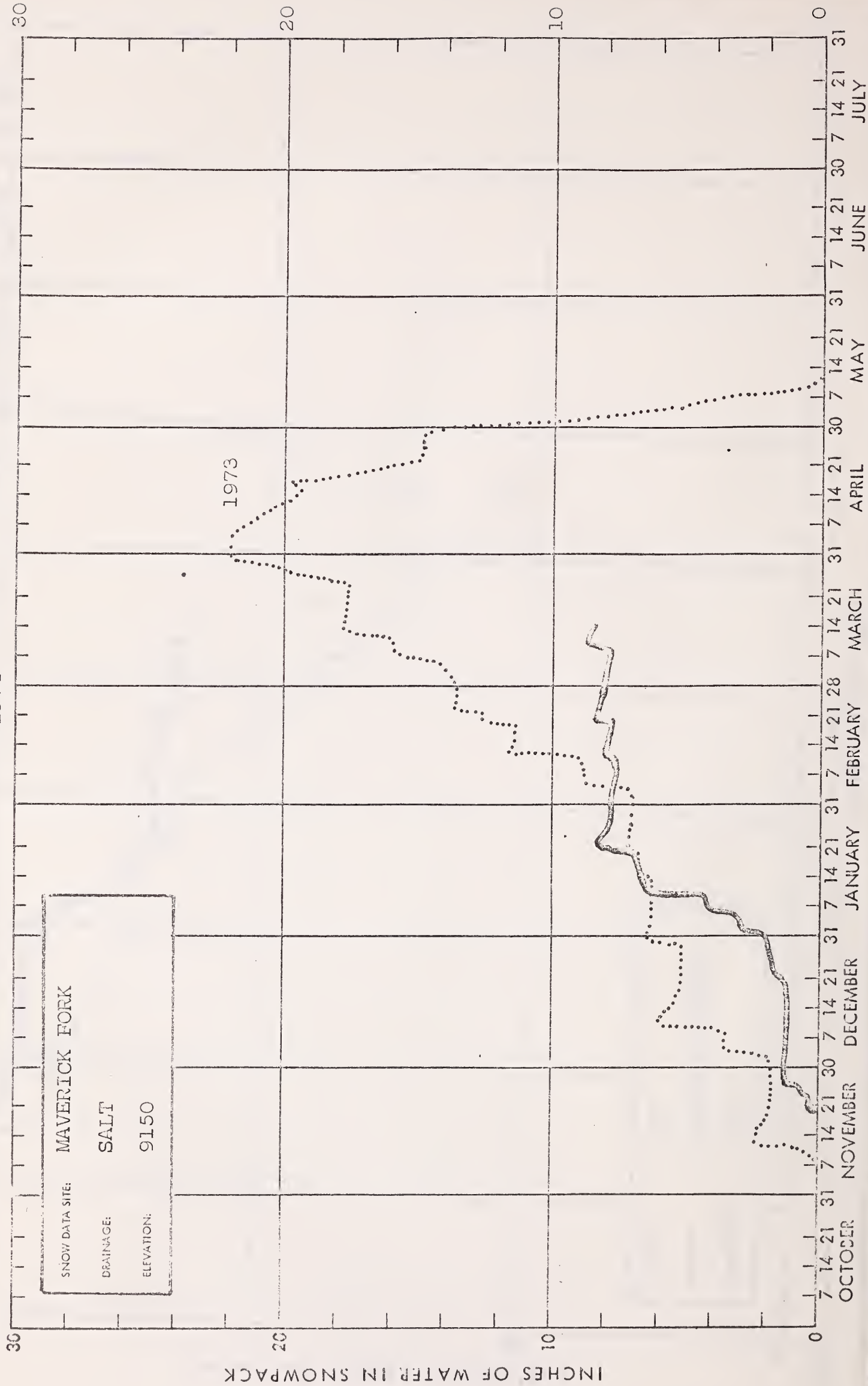
SNOW		ABOUT MARCH 15, 1974			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)				
NAME	Elevation				Last Year	Average †			
SALT RIVER									
Baldy *	9125	3/14	23	7.4	14.8	7.5			
Beaver Head	8000	3/15	0	0.0	6.8	2.8			
Canyon Creek	7500	3/14	9	3.6	13.0	3.1			
Canyon Point	7600	3/14	8	3.4	14.3	3.8**			
Coronado Trail	8000	3/15	0	0.0	8.2	2.2			
Forest Dale	6430	3/14	0	0.0	3.9	0.4			
Ft. Apache	9160	3/14	24	7.7	14.3	8.0			
Hannagan Meadows	9090	3/15	19	6.7	19.3	8.9**			
Hawley Lake	8300	3/14	14	5.2	15.1	6.4**			
Heber	7600	3/14	6	2.7	14.3	3.3			
Maverick Fork	9050	3/14	29	8.8	17.8	8.9			
McNary	7200	3/14	2	0.6	8.8	2.0			
Milk Ranch	7000	3/14	0	0.0	4.9	0.8			
Mt. Ord (A)	11000	NO	FLIGHT		29.3	23.8**			
Nutriosos *	8500	3/15	0	0.0	5.4	1.4			
Smith Cienega (A)	9850	NO	FLIGHT		25.3	17.7**			
Sunrise Summit	10600	3/13	46	14.7	22.6	---			
Wilson Lake	9000	3/13	33	10.0	18.4	11.4**			
Workman Creek	6900	3/13	10	4.1	20.1	4.9			
LITTLE COLORADO RIVER									
Baldy	9125	3/14	23	7.4	14.8	7.5			
Canyon Creek	7500	3/14	9	3.6	13.0	3.1			
Canyon Point	7600	3/14	8	3.4	14.3	3.8**			
Cheese Springs	8600	3/13	21	6.3	11.3	8.7**			
Forest Dale	6430	3/14	0	0.0	3.9	0.4			
Ft. Apache	9160	3/14	24	7.7	14.3	8.0			
Fort Valley	7350	3/14	1	0.7	8.9	2.0			
Happy Jack *	7630	3/14	5	1.6	15.6	2.6			
Heber	7600	3/14	6	2.7	14.3	3.3			
Inner Basin #1	10100	---	---	---	---	---			
Inner Basin #2	9750	---	---	---	---	---			
McNary	7200	3/14	2	0.6	8.8	2.0			
Mormon Lake	7350	3/14	9	3.2	16.2	3.4			
Mormon Mountain	7500	3/14	13	5.5	18.7	4.7			
Nutriosos	8500	3/15	0	0.0	5.4	1.4			
Snow Bowl #1	10260	3/15	31	9.0	22.0	9.9**			
Snow Bowl #2	11000	3/15	47	13.3	35.2	18.0**			
Wilson Lake	9000	3/13	33	10.0	18.4	11.4**			
† 1958-72 15-year period. (*) Adjacent drainage. (**) 1958-72 Adjusted average. (A) Aerial observation; Water content estimated.									
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† 1958-72 15-year period. (*) Adjacent drainage. (**) 1958-72 Adjusted average. (A) Aerial observation; Water content estimated.

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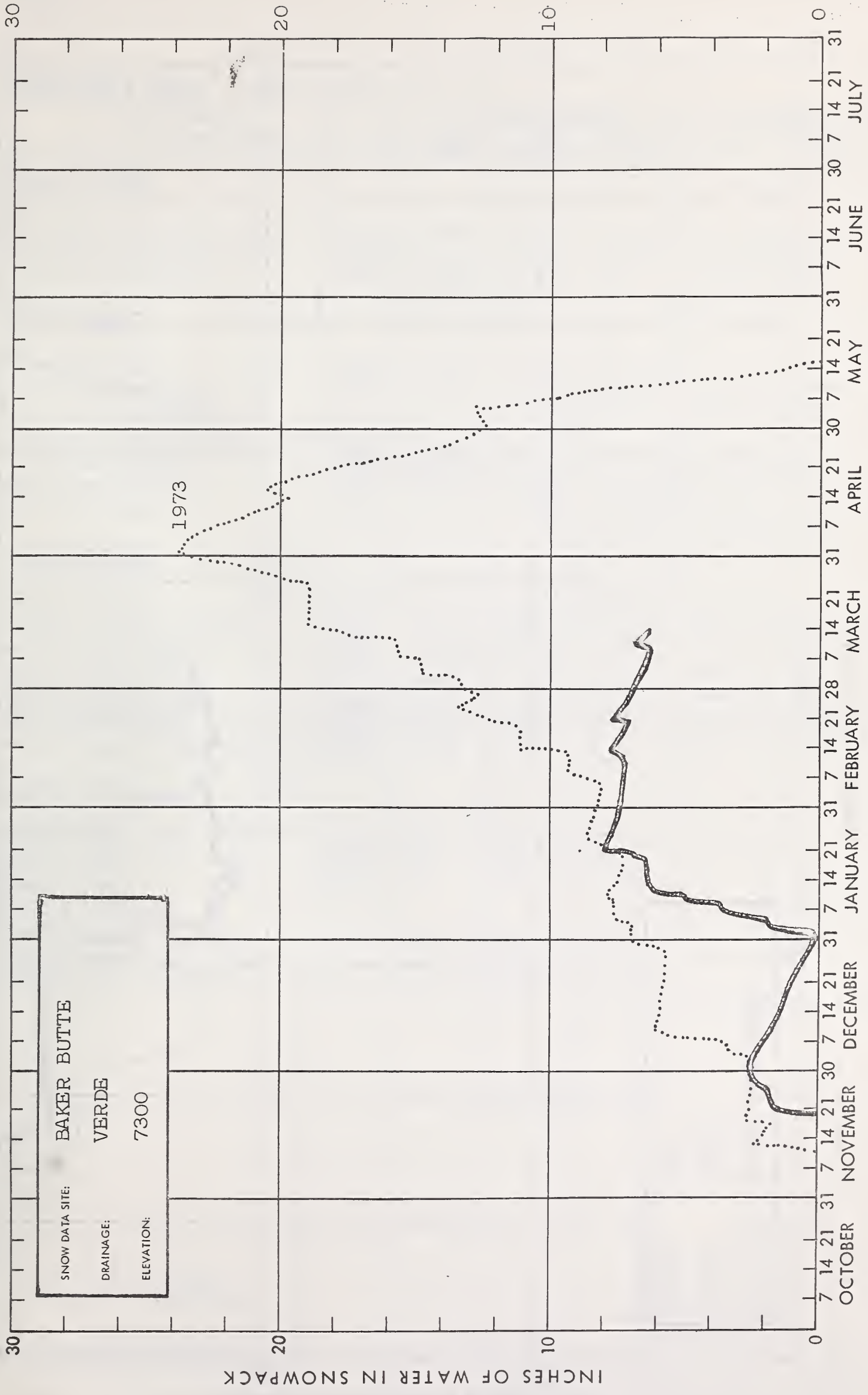
SNOW PILLOW DATA 1974



SNOW DATA SITE: MAVERICK FORK
DRAINAGE: SALT
ELEVATION: 9150

SNOW PILLOW DATA
1974

SNOW DATA SITE: BAKER BUTTE
DRAINAGE: VERDE
ELEVATION: 7300



SNOW DATA SITE: MORMON MOUNTAIN
DRAINAGE: VERDE
ELEVATION: 7500

INCHES OF WATER IN SNOWPACK

1973

OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

ELEVATION: 7500

PRECIPITATION (Inches) ABOUT MARCH 15, 1974

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. NOV. 1 TO DATE		
		Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>GILA RIVER</u>							
Silver Creek Divide	9000	3/14	1.10	1.20*	7.58	13.02*	58
Hannagan Meadows **	9030	3/15	1.06	1.10	9.52	11.69	81
Frisco Divide **	8000	3/14	.85	---	4.98	---	--
<u>SALT RIVER</u>							
Canyon Point	7600	3/14	1.58	1.83*	15.30	15.33*	100
Hannagan Meadows **	9030	3/15	1.06	1.10	9.52	11.69	81
Little Wildcat (Heber Snow Course)	7600	3/14	1.57	1.48	12.69	12.98	98
Maverick Fork	9050	3/14	1.30	1.12	11.11	11.14	100
Workman Creek **	6970	3/13	.98	1.50	11.65	15.78	74
Wilson Lake	9100	3/13	.70	1.25*	9.30	11.74*	79
<u>VERDE RIVER</u>							
Baker Butte	7300	3/14	1.42	1.68*	13.56	15.63*	87
Copper Basin Divide	6720	3/14	1.95	1.21*	9.19	10.30*	89
Fort Valley **	7350	3/14	.73	1.03	6.06	8.05	75
Happy Jack **	7480	3/14	.86	1.13	8.89	10.24	87
Mingus Mountain	7660	3/15	1.40	1.06	8.30	8.93	93
Mormon Mountain	7500	3/14	1.50	1.51*	12.63	14.66*	86
White Horse Lake Jct.**	7150	3/14	1.90	---	9.67	---	--
<u>LITTLE COLORADO</u>							
Inner Basin #1	9830	---	----	1.50	---	14.34	--
Inner Basin #2	10050	---	----	1.74*	---	16.41*	--
Greer Lakes	8500			.58		6.55	--
Little Wildcat (Heber Snow Course)	7600	3/14	1.57	1.48	12.69	12.98	98
Sheep Crossing (Baldy Snow Course)	9125	3/14	1.30	1.11	10.42	10.78	97
† 1958-72 Average							
* Adjusted Average							
** Data Supplied by U.S. Forest Service							
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PRECIPITATION AT SELECTED ARIZONA STATIONS 1/

STATION	Precipitation (Inches)	
	MONTH: February	PERIOD: November through February
Alpine	.03	2.80
Ash Fork	T	1.60
Clifton	.10	1.55
Douglas	0	1.36
Flagstaff WSO*	.26	5.91
McNary	.61	9.28
Payson Ranger Station	.37	5.38
Phoenix WSFO **	.02	1.95
Prescott (City)	.14	3.23
Springerville	T	.20
Tucson WSO*	T	1.93
Winslow WSO*	.03	1.80
Yuma WSO*	0	.69

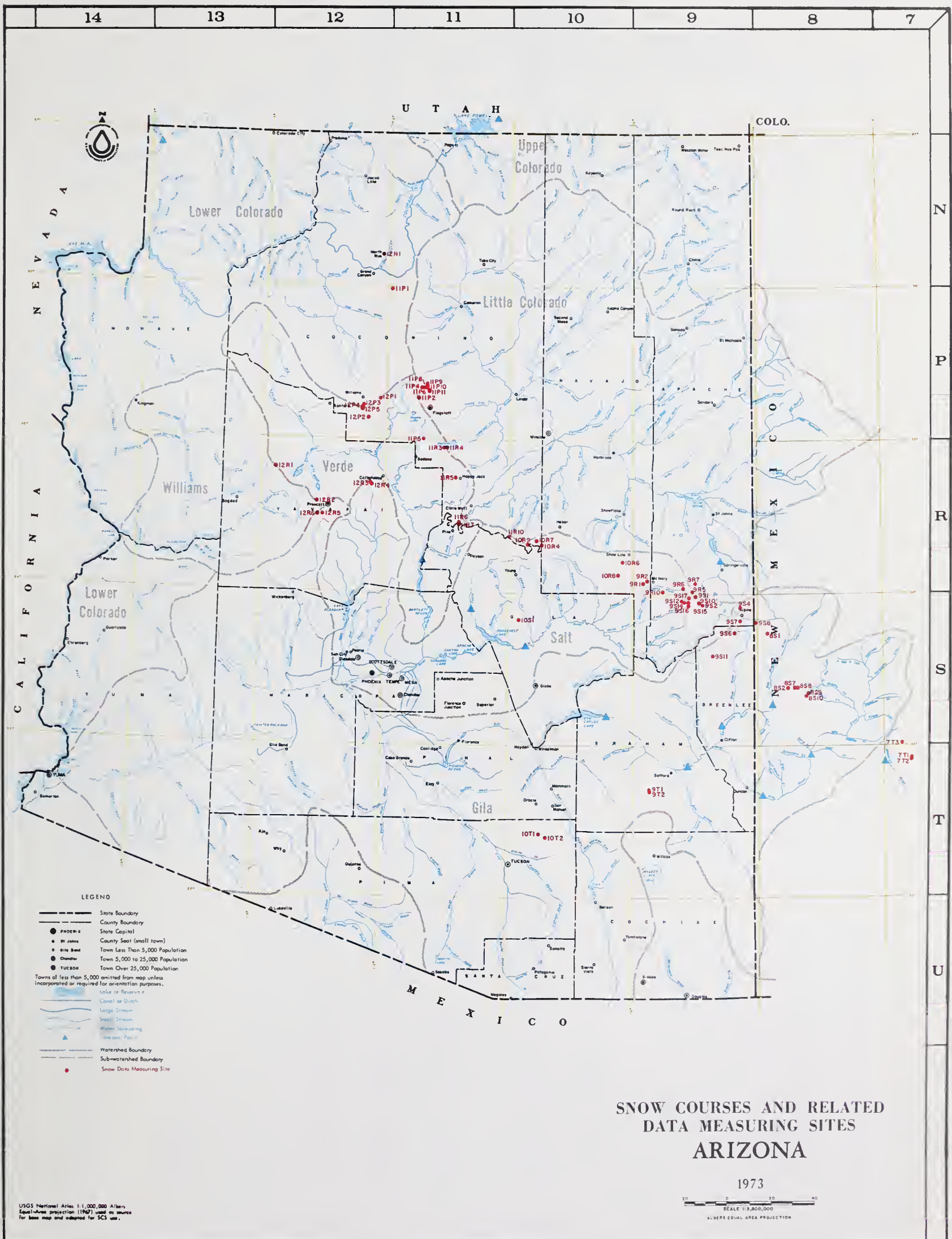
1/ Data and Analysis furnished by National Weather Service, Phoenix, Arizona

WSO * Weather Service Office

WSFO* Weather Service Forecast Office

SOIL MOISTURE ABOUT MARCH 15, 1974

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +
<u>GILA RIVER</u>							
Frisco Divide	8000	48	13.3	3/14	8.0	14.6	10.9
<u>SALT RIVER</u>							
Black River Divide	9100	48	16.8	3/14	14.8	17.9	16.6
Canyon Creek	7500	48	18.3	3/14	17.5	17.2	16.0
Corduoy Creek	6000	36	13.5	3/14	7.3	14.0	10.2
McNary	7200	48	16.3	3/13	13.9	17.9	15.4
<u>VERDE RIVER</u>							
Mormon Mountain	7500	48	16.1	3/14	14.0	17.9	16.4
Newman Park	6750	48	17.7	3/14	16.5	19.5	18.5
+ 1958-72 15-year average							



INDEX to SNOW COURSES and SOIL MOISTURE STATIONS

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.	DRAINAGE	OBSERVER	RECORD BEGAN
11P10A	Agassiz	32	23N	7E	11200	Little Colorado	SCS-C.F.*	1968
11R7	Baker Butte #2	9	12N	9E	7700	Verde	SCS	1971
11R6PSP	Baker Butte	4	12N	9E	7300	Verde	SCS	1966
9S1APSP	Baldy	28	7N	27E	9125	Little Colorado	SCS	1950
9S15	Baldy #2	12	6N	26E	9750	Little Colorado	SCS	1963
9S16	Baldy #3	13	6N	26E	10950	Little Colorado	SCS	1963
10T1	Bear Wallow	6	12S	16E	8100	Gila	FS	1948
9S6	Beaver Head	13	4N	30E	8000	San Francisco	FS	1938
12P5	Bill Williams Intermediate	17	21N	2E	8550	Cataract	FS	1967
12P4	Bill Williams Summit	17	21N	2E	8950	Verde	FS	1967
9S10m	Black River Divide	10	6N	27E	9400	Salt	SCS	1954
12N1	Bright Angel	34	33N	3E	8400	Bright Angel Creek	NPS	1947
12R1	Camp Wood	3	16N	6W	5700	Verde	FS	1946
10R7M	Canyon Creek #2	18	11N	15E	7500	Little Colorado	SCS	1958
10R9P	Canyon Point	28	11N	14E	7600	Salt	SCS	1967
12P1M	Chalender	27	22N	3E	7100	Verde	FS	1947
9R7	Cheese Springs	28	8N	27E	8600	Little Colorado	SCS	1969
12R6P	Copper Basin Divide	23	13N	3W	6720	Verde	SCS	1963
10R8m	Corduoy Creek	4	8N	21E	6000	Salt	SCS	1954
9S7	Coronado Trail	26	5N	30E	8000	San Francisco	FS	1938
9T2A	Crazy Horse	34	8S	24E	10200	Gila	FS	1963
11P11a	Doyle Saddle	4	22N	7E	10900	Little Colorado	SCS	1968
7T1	Emory Pass #1	16	16S	9W**	7800	Mimbres	SCS	1967
7T2	Emory Pass #2	16	16S	9W**	7800	Mimbres	SCS	1967
10R6	Forest Dale	2	9N	21E	6430	Salt	BIA	1939
9R5	Ft. Apache	18	7N	27E	9160	Little Colorado	SCS	1951
11P2P	Ft. Valley	22	22N	6E	7350	Little Colorado	FS	1947
8S1MP	Frisco Divide	31	6S	20W**	8000	San Francisco	FS	1938
12R4	Gaddes Canyon	11	15N	2E	7600	Verde	SCS	1954
11P1	Grand Canyon	21	30N	4E	7500	Hance Creek	NPS	1947
9S11P	Hannagan Meadows	19	3N	29E	9090	San Francisco	FS	1964
11R5P	Happy Jack	30	16N	9E	7630	Verde	FS	1951
9R10	Hawley Lake	13	7N	24E	8300	Salt	BIA	1966
10R4PSP	Heber	28	11N	15E	7600	Little Colorado	SCS	1950
9T1A	High Peak	34	8S	24E	10500	Gila	FS	1963
8S9A	Hummingbird	19	11S	17W**	10550	Gila	SCS	1964
11P9P	Inner Basin #1	28	23N	7E	10000	Little Colorado	C.F.*	1967
11P8P	Inner Basin #2	28	23N	7E	9750	Little Colorado	C.F.*	1967
12R2	Iron Springs	22	14N	3W	6200	Bill Williams	SCS	1946
9S2APSP	Maverick Fork	13	6N	27E	9150	Salt	SCS	1950
7S3A	McKnight Cabin	10	15S	10W**	9300	Mimbres	SCS	1967
9R2M	McNary	23	8N	23E	7200	Salt	BIA	1939
9R1	Milk Ranch	33	8N	23E	7000	Salt	BIA	1941
12R3	Mingus Mountain	3	15N	2E	7100	Verde	SCS	1947
8S2	Mogollon	2	11S	19W**	7000	San Francisco	SCS	1953
11R4	Mormon Lake	13	18N	8E	7350	Little Colorado	SCS	1947
11R3MAPSP	Mormon Mountain	14	18N	8E	7500	Verde	SCS	1950
9S12A	Mt. Ord	4	6N	26E	11200	Salt	SRP-SCS	1966
11P5M	Newman Park	25	19N	6E	6750	Verde	SCS	1963
9S4	Nutriso	23	6N	30E	8500	San Francisco	FS	1938
11R10	Promontory Butte	5	11N	13E	7930	Little Colorado	SCS	1973
8S7	Redstone Trail	5	11S	18W**	8600	San Francisco	SCS	1961
10T2	Rose Canyon	15	12S	16E	7300	Gila	FS	1948
8S8P	Silver Creek Divide	4	11S	18W**	9000	San Francisco	SCS	1964
9S14A	Smith Cienega	10	6N	26E	10050	Salt	SRP-SCS	1966
11P4	Snow Bowl #1	36	23N	6E	10260	Verde	FS	1961
11P6	Snow Bowl #2	31	23N	7E	11000	Verde	FS	1965
9S8	State Line	6	6S	21W**	8000	San Francisco	FS	1938
9S17	Sunrise Summit	36	7N	26E	10600	Salt	SCS	1972
12P2P	White Horse Lake Jct.	2	20N	2E	7180	Verde	FS	1967
12R5	White Spar	19	13N	2W	6000	Verde	SCS	1963
8S10A	Whitewater	19	11S	17W**	10750	Gila	SCS	1964
12P3	Williams Ski Run	9	21N	2E	7720	Cataract	FS	1967
9R6P	Wilson Lake	4	7N	26E	9000	Salt	SCS	1966
10S1P	Workman Creek	33	6N	14E	6900	Salt	FS	1952

A Aerial Snow Depth Marker

M Soil Moisture Station

P Precipitation Storage Gage

** NM Principal Meridian

a Aerial Snow Depth Marker Only

m Soil Moisture Station Only

SP Snow Pressure Pillow.

* City of Flagstaff

The Following Organizations Cooperate in the Arizona Snow Survey Work

FEDERAL

- Department of Agriculture
 - Soil Conservation Service
 - Forest Service
 - Apache Forest
 - Coconino Forest
 - Coronado Forest
 - Gila Forest
 - Kaibab Forest
 - Prescott Forest
 - Rocky Mountain Forest and Range Experiment Station
 - Tonto Forest
- Department of Commerce
 - NOAA, National Weather Service
- Department of Interior
 - Bureau of Reclamation
 - Region 111
 - Geological Survey
 - Arizona District
 - New Mexico District
 - Bureau of Indian Affairs
 - Fort Apache Reservation
 - San Carlos Irrigation Project
 - National Park Service
 - Grand Canyon National Park
- Gila Water Commissioner
 - Safford, Arizona

STATE

- Arizona Game and Fish Department
- Arizona State Parks Board
- University of Arizona
 - Arizona Agricultural Experiment Station
 - Water Resource Research Center
 - Department of Watershed Management

MUNICIPAL

- City of Flagstaff

IRRIGATION PROJECTS

- Salt River Valley Water User's Association
 - Phoenix, Arizona
- San Carlos Irrigation and Drainage District
 - Coolidge, Arizona
- Maricopa County Municipal Water Conservation District

PRIVATE

- Southwest Forest Industries, Inc.
 - McNary, Arizona
- Fort Apache Indian Reservation
 - White Mountain Recreation Enterprises

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with the Snow Survey"*